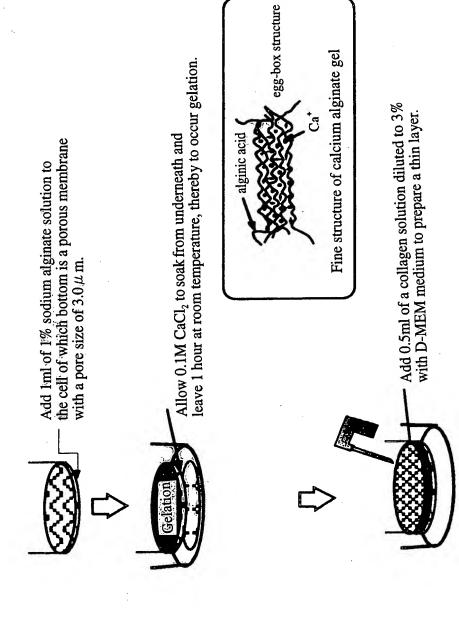
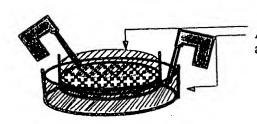
FIG. 1

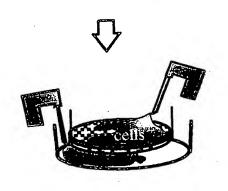


Gelation in CO_2 incubator at 37% for 20 minutes.

FIG. 2



Add D-MEM medium, 2 ml into the cell and 3 ml to a schale, and then infiltrate overnight.



Remove the medium in the cell or schale, spread 10,000 cells (0.5ml) of fibroblast collected by trypsin treatment, and add 3ml of D-MEM medium to the schale.

Leave in a 0.5% CO₂ incubator for about 1 hour at 37% to allow the attachment of fibroblast.

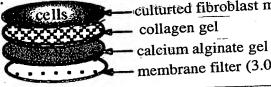


Exchange the medium on Day 2 after culture, and further culture for a period of one day to form a confluent cell monolayer.





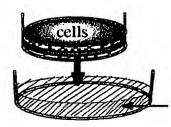
Laminate structure of gel and cultured cell monolayer



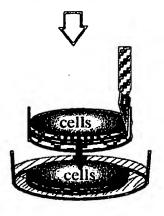
-culturted fibroblast monolayer collagen gel

- membrane filter $(3.0 \,\mu\,\text{m})$

FIG. 3

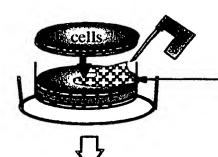


Soak the cell into 0.1M EDTA solution to dissolve the calcium alginate gel and liberate it from the membrane filter



Remove extra water from the cell by suction, insert a scalpel through the inner wall of the cell to hollow the filter, thereby suspending a cell sheet of collagen gel in D-MEM medium.





Add 0.5ml of a collagen solution onto the gel sheet which is not suspended, and overlay a gel formed in the same manner as above



Culture three cell layers laminated with a sandwiched collagen gel, in D-MEM medium.